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Mr. Todd M. Frazier, Chief
Surveillance Branch
NIOSH
Robert A. Taft Laboratories
4676 Columbia Parkway
Cincinnati, Ohio 45226

Dear Mr. Frazier:

I am enclosing, for your information, a copy of the results of the initial Epicor II processing of the first 6000 gallons of radioactive water at Three Mile Island. A comparison between columns three and five shows that all radionuclide concentrations in the influent were reduced below the maximum permissible concentrations specified in 10 CFR Part 20 for unrestricted areas.

Results of additional decontamination activities will be forwarded to your as I receive them.

Sincerely,

POOR ORIGINAL

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Michael A. Parsont, Chief
Radiological Health Standards Branch
Office of Standards Development

Enclosure:
As stated

IDENTIFIED
TM

Task No. RH 902-8

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OFFICE ▶	RHSB:SD <i>SB</i>	RHSB:SD <i>MA</i>			
SURNAME ▶	DSFlack:sb	MAParsont			
DATE ▶	11/13/79	11/15/79			

Results of Initial EPICOR II Processing at TMI-2

A sample of the first 6000 gallons processed through EPICOR II showed the following reductions in radionuclide concentrations:

EPICOR II PROCESSING

Radionuclide Concentrations ($\mu\text{c/ml}$)

<u>RADIONUCLIDE</u>	<u>ACTUAL INFLUENT</u>	<u>ACTUAL PROCESSED EFFLUENT</u>	<u>DECONTAMINATION FACTOR</u>	<u>10 CFR 20 MPC CONC.</u>
Cesium 137	7.2	$<5.4 \times 10^{-7}$	$>1.3 \times 10^7$	2×10^{-5}
Cesium 134	1.6	$<3.0 \times 10^{-7}$	$>5.3 \times 10^6$	9×10^{-6}
Lanthanum 140	0.04*	$<7.0 \times 10^{-7}$	$>5.8 \times 10^4^*$	2×10^{-5}
Barium 140	0.04*	$<7.0 \times 10^{-7}$	$>5.8 \times 10^4^*$	2×10^{-5}
Strontium 89	2.1*	$<1.7 \times 10^{-7}^*$	$>1.2 \times 10^7^*$	3×10^{-6}
Strontium 90	1.6*	$<1.1 \times 10^{-7}^*$	$>1.4 \times 10^7^*$	3×10^{-7}

*ESTIMATED

The concentrations in the processed water are well below the maximum permissible concentrations specified in 10 CFR Part 20 for unrestricted areas.

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